PTO/SB/05 (01-04)

Approved for use through 07/31/2006. OMB 0651-0032 U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE

Fax

Date

44,757

3/28/01

ter the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control numbe

Country

Signature

Name (Print/Type)

Jeffrey T. Helvey

UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No. 1875.138000G First Inventor Arya R. Behzad Large Gain Range, High Linearity, Low Noise MOS VGA Title Express Mail Label No.

(Only for new nonprovisional applications under 37 CFR 1.53(b)) Mail Stop Patent Application Commissioner for Patents APPLICATION ELEMENTS ADDRESS TO: P.O. Box 1450 See MPEP chapter 600 concerning utility patent application contents. Alexandria VA 22313-1450 1. X Fee Transmittal Form (e.g., PTO/SB/17) CD-ROM or CD-R in duplicate, large table or (Submit an original and a duplicate for fee processing) Computer Program (Appendix) Applicant claims small entity status. 8. Nucleotide and/or Amino Acid Sequence Submission See 37 CFR 1.27. (if applicable, all necessary) з. 🗓 Specification [Total Pages_ Computer Readable Form (CRF) (preferred arrangement set forth below) - Descriptive title of the invention Specification Sequence Listing on: b. - Cross Reference to Related Applications - Statement Regarding Fed sponsored R & D CD-ROM or CD-R (2 copies); or - Reference to sequence listing, a table, or a computer program listing appendix Paper - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings (if filed) Statements verifying identity of above copies - Detailed Description ACCOMPANYING APPLICATION PARTS - Claim(s)
- Abstract of the Disclosure Assignment Papers (cover sheet & document(s)) 4. X Drawing(s) (35 U.S.C. 113) [Total Sheets 10. X X Power of 37 CFR 3.73(b) Statement (when there is an assignee) Attorney 2 5. Oath or Declaration Total Sheets English Translation Document (if applicable) a. Newly executed (original or copy) Information Disclosure Copies of IDS 12. Statement (IDS)/PTO-1449 Citations b. X Copy from a prior application (37 CFR 1.63(d)) 13. X **Preliminary Amendment** (for continuation/divisional with Box 18 completed) 14. X Return Receipt Postcard (MPEP 503) (Should be specifically itemized) **DELETION OF INVENTOR(S)** Certified Copy of Priority Document(s) 15. 📖 Signed statement attached deleting inventor(s) (if foreign priority is claimed) name in the prior application, see 37 CFR Nonpublication Request under 35 U.S.C. 122 1.63(d)(2) and 1.33(b). (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. 6. X Application Data Sheet. See 37 CFR 1.76 17. X Other: Authorization under 37 CFR § 1.136(a)(3) The name of the assignee is: Broadcom Corporation 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: X Continuation Divisional Continuation-in-part (CIP) of prior application No.: Art Unit: __2817 Nguyen, Khanh V. Prior application information: Examiner Nguyen, Khanh V. Art Unit: 2817

For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS \square 26111 **Customer Number:** Correspondence address below Name Address City State Zip Code

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Telephone

Registration No. (Attorney/Agent)

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
to a collection of information upless it displays a valid OMB control work. Under the Paperwork Reduction Act of 1995, no persons are required to

7	FEE TRANSMITTAL
•	for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

\$)	810	.0

Complete if Known						
Application Number	To Be Assigned					
Filing Date	Herewith					
First Named Inventor	Arya R. Behzad					
Examiner Name	To Be Assigned					
Art Unit	To Be Assigned					
Attorney Docket No.	1875.138000G					

METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)					
Check X Credit card Money Order None	3. Al	DDITI	ONA	L FEE	S	The second second second
**Charge any deficiencies or credit any overpayments in	<u>Large l</u>	Entity	Small	Entity	•	
Deposit Account: the fees to Deposit Acci. No. 19-0036. Deposit	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
Account 19-0036	1051	130	2051	65	Surcharge - late filing fee or oath	reeraiu
Deposit Account Name Sterne Kessler, Goldstein & Fox P.L.L.C.	1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
The Director is authorized to: (check all that apply)	1053	130	1053	130	Non-English specification	
Charge fee(s) indicated below Credit any overpayments	1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
Charge any additional fee(s) or any underpayment of fee(s)	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.	1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
FEE CALCULATION	1251	110	2251	55	Extension for reply within first month	
1. BASIC FILING FEE	1252	420	2252	210	Extension for reply within second month	
Large Entity Small Entity	1253	950	2253	475	Extension for reply within third month	
Fee Fee Fee Fee Pee Paid Code (\$) Code (\$)	1254	1,480	2254	740	Extension for reply within fourth month	
1001 770 2001 385 Utility filing fee	1255	2,010	2255	1,005	Extension for reply within fifth month	
1002 340 2002 170 Design filing fee 770 00	1401	330	2401	165	Notice of Appeal	
1003 530 2003 265 Plant filing fee	1402	330	2402	165	Filing a brief in support of an appeal	
1004 770 2004 385 Reissue filing fee	1403	290	2403	145	Request for oral hearing	
1005 160 2005 80 Provisional filing fee	1451	1,510	1451	1,510	Petition to institute a public use proceeding	
SUBTOTAL (1) (\$) 770.00	1452	110	2452	55	Petition to revive - unavoidable	
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1453	1,330	2453	665	Petition to revive - unintentional	
Fee from	1501		2501	665	Utility issue fee (or reissue)	
Total Claims 16 - 20 **= 0 X 18 = 0	1502	480	2502	240	Design issue fee	
Independent 2 2 2 7 7 7 8	1503	640	2503	320	Plant issue fee	
Claims 2 - 3 = 0 \ Multiple Dependent 290 = 0	1460	130	1460	130	Petitions to the Commissioner	
Large Entity Small Entity	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
Fee Fee Fee Fee Description	1806	180	1806	180	Submission of Information Disclosure Stmt	
Code (\$) Code (\$) 1202 18 2202 9 Claims in excess of 20	8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40.00
1201 86 2201 43 Independent claims in excess of 3	1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1203 290 2203 145 Multiple dependent claim, if not paid	1810	770	2810	385	For each additional invention to be	
1204 86 2204 43 ** Reissue independent claims over original patent	1004	770	2004	205	examined (37 CFR 1.129(b))	
1205 18 2205 9 ** Reissue claims in excess of 20	1801 1802	770 900	2801 1802	385 900	Request for Continued Examination (RCE) Request for expedited examination	
and over original patent	1002	ا ۵۰۰	1002	500	of a design application	
SUBTOTAL (2) (\$) 0.00	Other	٠.				
**or number previously paid, if greater; For Reissues, see above	*Redu	ced by	Basic F	iling F	ee Paid SUBTOTAL (3) (\$)	40.00

SUBMITTED BY (Complete (if applicable)) Registration No. Name (Print/Type) Telephone (202) 371-2600 <u>Jeffrev T. Helvev</u> Signature

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Robert Greene Sterne Edward J. Kessler Jorge A. Goldstein David K.S. Cornwell Robert W. Esmond Tracy-Gene G. Durkin Michael B. Ray Robert E. Sokohl Eric K. Steffe Michael Q. Lee Steven R. Ludwig John M. Covert Linda E. Alcorn Robert C. Millonig Lawrence B. Bugaisky Donld J. Featherstone Michael V. Messinger Judith U. Kim Timothy J. Shea, Jr. Patrick E. Garrett Heidi L. Kraus Edward W. Yee Albert L. Ferro* Donald R. Banowit Peter A. Jackman Teresa U. Medler Jeffrey S. Weaver Kendrick P. Patterson Vincent L. Capuano Eldora Ellison Floyd Thomas C. Fiala Brian J. Del Buono Virgil Lee Beaston Kimberly N. Reddick Theodore A. Wood Elizabeth J. Haanes Joseph S. Ostroff Frank R. Cottingham Christine M. Unuffer Ree Lynn Prengaman Jane Shershenovich' George S. Bardmesser Daniel A. Klein' Jason D. Eisenberg Michael D. Specht Andrea J. Kamage Tracy L. Muller' LuAnne M. DeSantis John J. Figueroa Ann E. Summerfield Tirea S. Coston' Aric W. Ledford'

Jessica L. Parezo Timothy A. Doyle' Cynthia M. Bouchez Nicole D. Dretar' Ted J. Ebersole Registered Patent Agents • Karen R. Markowicz Nancy J. Leith Helene C. Carlson

Michael D. Specht

Registered Patent Agents •
Karen R. Markowicz
Nancy J. Leith
Helene C. Carlson
Gaby L. Longsworth
Matthew J. Dowd
Aaron L. Schwartz
Mary B. Tung
Katrina Y. Pei Quach
Bryan L. Skelton
Robert A. Schwartzman

Teresa A. Colella
Jeffrey S. Lundgren
Victoria S. Rutherford
Eric D. Hayes
Michelle K. Holoubek
Robert H. DeSelms
Simon J. Elliott
Julie A. Heider
Mita Mukerjee
Scott M. Woodhouse
Of Counsel
Kenneth C. Bass III
Evan R. Smith
Marvin C. Guthrie
*Admitted only in Maryland
*Admitted only in Maryland
*Practice Limited to
*Pract

March 26, 2004

WRITER'S DIRECT NUMBER: (202) 772-8675 INTERNET ADDRESS: JHELVEY@SKGF.COM

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450 Mail Stop Patent Application

Re:

U.S. Non-Provisional Utility Patent Application

Appl. No. To Be Assigned; Filed: Herewith

(Continuation of Appl. No. 10/183,552; Filed: June 28, 2002)

For: Large Gain Range, High Linearity, Low Noise MOS VGA

Inventor:

Arya R. Behzad

Our Ref:

1875.138000G

Sir:

The following documents are forwarded herewith for appropriate action by the U.S. Patent and Trademark Office:

- 1. Fee Transmittal Form (PTO/SB/17);
- 2. Utility Patent Application Transmittal (PTO/SB/05);
- 3. U.S. Utility Patent Application entitled:

Large Gain Range, High Linearity, Low Noise MOS VGA

and naming as inventor:

Arya R. Behzad

the application consisting of:

- a. An Application Data Sheet (37 C.F.R. § 1.76);
- b. A copy of the original executed combined Declaration and Power of Attorney as filed in U.S. Appl. No. 09/547,968;

Sterne, Kessler, Goldstein & Fox PLLC.: 1100 New York Avenue, NW: Washington, DC 20005: 202.371.2600 f 202.371.2540: www.skgf.com

- c. A specification containing:
 - i. 163 pages of description prior to the claims;
 - ii. 6 pages of claims (10 claims); and
 - iii. a one (1) page abstract; and
- d. 77 sheets of drawings (Figures 1, 2-3, 4, 5, 6-7, 8-11, 12-13, 14, 15-16, 17-18, 19, 20, 21, 22, 23, 24a, 24b, 24c, 25, 26, 27, 28a, 28b, 28c-28e, 28f-28g, 28h, 28i, 28j, 28k, 29, 30-31, 32, 33, 34, 35, 36, 37, 38, 39-40, 41, 42, 43, 44a, 44b, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59-60, 61-62, 63, 64, 65, 66-67, 68, 69a-69e, 70, 71, 72, 73, 74, 75, 76, 77, 78a-78c, 79, and 80);
- 4. Authorization to Treat a Reply As Incorporating An Extension of Time Under 37 C.F.R. § 1.136(a)(3);
- 5. Recordation Form Cover Sheet;
- 6. A copy of the original executed Assignment to Broadcom Corporation as filed in U.S. Appl. No. 09/547,968, recordation of which is hereby respectfully requested;
- 7. A Preliminary Amendment Under 37 C.F.R. § 1.115;
- 8. Three (3) annotated drawing sheets, showing corrections to Figures 78c, 79, and 80;
- 9. Five (5) replacement drawing sheets, showing Figures 34, 75, 77, 78a-78c, 79, and 80;
- 10. A copy of the original executed Revocation of Prior Power of Attorney and Appointment of New Attorneys of Record as filed in U.S. Appl. No. 09/547,968;
- 11. A copy of the original executed Certificate Under 37 C.F.R. § 3.73(b) as filed in U.S. Appl. No. 09/547,968, with a copy of the Assignment attached;
- 12. Credit Card Payment Form (PTO-2038); and
- 13. Two (2) return postcards.

Commissioner for Patents March 26, 2004 Page 3

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible. The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

JA Hebrer

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Jeffrey T. Helvey Agent for Applicant

Registration No. 44,757

JTH/LMY:krd Enclosures

240468_1.DOC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Arya R. Behzad

To Be Assigned

Filed:

Appl. No.:

Herewith

Confirmation No.:

To Be Assigned

Art Unit:

To Be Assigned

Examiner:

To Be Assigned

Atty. Docket:

1875.138000G

For: Large Gain Range, High Linearity,

Low Noise MOS VGA

Authorization to Treat a Reply as Incorporating an Extension of Time Under 37 C.F.R. § 1.136(a)(3)

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

The U.S. Patent and Trademark Office is hereby authorized to treat any concurrent or future reply that requires a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. The U.S. Patent and Trademark Office is hereby authorized to charge all required extension of time fees to our Deposit Account No. 19-0036, if such fees are not otherwise provided for in such reply.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Jeffrey T. Helvey

Agent for Applicant

Registration No. 44,757

Date:

3/20/04

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

240531 1.DOC